

WHAT IS CLAIMED IS:

1. A display device comprising a transistor and an electrode electrically connected to the transistor,
5 wherein the electrode comprises a first transparent conductive film comprising indium tin oxide containing one or both of silicon oxide and silicon as the bottom layer, and a second transparent conductive film comprising indium tin oxide as the top layer.
- 10 2. A display device comprising a transistor and an electrode electrically connected to the transistor,
 wherein the electrode comprises a first transparent conductive film comprising indium tin oxide containing one or both of silicon oxide and silicon as the bottom layer, and a second transparent conductive film that has a work function of 5.0 eV
15 or more as the top layer.
3. A display device comprising a transistor and an electrode electrically connected to the transistor,
 wherein the electrode comprises a first amorphous transparent
20 conductive film as the bottom layer and a second crystalline transparent conductive film as the top layer.
4. A display device comprising a transistor and an electrode electrically connected to the transistor,
25 wherein the electrode comprises a first transparent conductive film comprising amorphous indium tin oxide as the bottom layer and a second transparent conductive film comprising crystalline indium tin oxide as the top layer.
5. A display device comprising a transistor and an electrode electrically
30 connected to the transistor,

wherein the electrode comprises a first transparent conductive film including oxygen at 61 atomic %, indium at 34 atomic %, tin at 2 atomic %, and silicon at 3 atomic % as the bottom layer, and a second transparent conductive film including oxygen at 62 atomic %, indium at 36 atomic %, and tin at 2 atomic % as the top layer.

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6. The display device according to claim 1, wherein the second transparent conductive film has a film thickness of 30 nm or less.

7. The display device according to claim 2, wherein the second transparent
10 conductive film has a film thickness of 30 nm or less.

8. The display device according to claim 3, wherein the second transparent conductive film has a film thickness of 30 nm or less.

15 9. The display device according to claim 4, wherein the second transparent conductive film has a film thickness of 30 nm or less.

10. The display device according to claim 5, wherein the second transparent conductive film has a film thickness of 30 nm or less.

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11. The display device according to claim 1, wherein a terminal portion of a flexible printed circuit has a laminated structure of a conductive film that has a specific resistance of $3\mu\Omega$ or less, the first transparent conductive film, and the second transparent conductive film.

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12. The display device according to claim 2, wherein a terminal portion of a flexible printed circuit has a laminated structure of a conductive film that has a specific resistance of $3\mu\Omega$ or less, the first transparent conductive film, and the second transparent conductive film.

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13. The display device according to claim 3, wherein a terminal portion of a flexible printed circuit has a laminated structure of a conductive film that has a specific resistance of $3\mu\Omega$ or less, the first transparent conductive film, and the second transparent conductive film.

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14. The display device according to claim 4, wherein a terminal portion of a flexible printed circuit has a laminated structure of a conductive film that has a specific resistance of $3\mu\Omega$ or less, the first transparent conductive film, and the second transparent conductive film.

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15. The display device according to claim 5, wherein a terminal portion of a flexible printed circuit has a laminated structure of a conductive film that has a specific resistance of $3\mu\Omega$ or less, the first transparent conductive film, and the second transparent conductive film.

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16. The display device according to claim 1, wherein a silicon nitride film is provided below the first transparent conductive film.

17. The display device according to claim 2, wherein a silicon nitride film is provided below the first transparent conductive film.

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18. The display device according to claim 3, wherein a silicon nitride film is provided below the first transparent conductive film.

19. The display device according to claim 4, wherein a silicon nitride film is provided below the first transparent conductive film.

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20. The display device according to claim 5, wherein a silicon nitride film is provided below the first transparent conductive film.

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21. A method of manufacturing a display device, comprising:

forming a first transparent conductive film comprising indium tin oxide containing one or both of silicon oxide and silicon;

forming a second transparent conductive film comprising indium tin oxide over the second transparent conductive film;

using a resist mask as a mask and a weak acid solution to etch the first transparent conductive film and the second transparent conductive film; and

performing heat treatment to crystallize the second transparent conductive film.

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22. The method according to claim 21, wherein the second transparent conductive film has a surface planarized between the step of forming the second transparent conductive film and the step of etching the first transparent conductive film and the second transparent conductive film.

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23. The method according to claim 21, wherein a strong acid solution is used to subject the second transparent conductive film to surface treatment after crystallizing the second transparent conductive film.

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24. The display device according to claim 1, wherein the display device is applied in an electronic device selected from the group consisting of a video camera, a laptop personal computer, a personal digital assistant, a digital camera and a mobile phone.

25. The display device according to claim 2, wherein the display device is applied in an electronic device selected from the group consisting of a video camera, a laptop personal computer, a personal digital assistant, a digital camera and a mobile phone.

26. The display device according to claim 3, wherein the display device is applied in an electronic device selected from the group consisting of a video camera, a laptop personal computer, a personal digital assistant, a digital camera and a mobile

phone.

27. The display device according to claim 4, wherein the display device is applied in an electronic device selected from the group consisting of a video camera, a laptop personal computer, a personal digital assistant, a digital camera and a mobile
5 phone.

28. The display device according to claim 5, wherein the display device is applied in an electronic device selected from the group consisting of a video camera, a laptop personal computer, a personal digital assistant, a digital camera and a mobile
phone.

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24. The method according to claim 21, wherein the display device is applied in an electronic device selected from the group consisting of a video camera, a laptop personal computer, a personal digital assistant, a digital camera and a mobile phone.